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KNEE INJURY AND OSTEOARTHRITIS OUTCOME SCORE (KOOS) DURING ONE YEAR AFTER ARTHROSCOPIC INTERVENTION

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Purpose: Meniscal tear is considered the first signal feature of knee osteoarthritis (Englund 2004). In arthroscopy loose bodies are removed and/or the tears are resected.
Aim: (i) To inspect the tenor of KOOSi in middle-aged patients during one year after arthroscopic treatment, (ii) to clarify factors associated with poor outcome.
Methods: The study was performed in 92 consecutive patients in 32-56 (mean 45) yrs of age. Fourty-four patients were male and 48 - female. Knee complaints varied from one year (20 patients) to 1-3 yrs (25 patients) to 4-10 yrs (26) and to 11-30 yrs (18).
Arthroscopy was performed via usual AM and AL portals. Cartilage lesion in three compartments was graded as 0-IV and was finally expressed by SFA score. Patients' self-assessment of their knee conditions was established by the KOOS 5 subscales: symptoms (S), pain (P), limitations in ADL (activities of daily life) and SP/Rec (sport-recreation), rate of QL (quality of life) prior to and 1, 3 and 12 months after the intervention. Seventy-seven subjects of similar age without knee complaints served as controls.
Results: Meniscal damage was diagnosed in 70 cases, cartilage lesions - in 78 cases, synovitis - in 71 cases. ACL was ruptured in 16.
As expected, prior to the arthroscopy severe knee complaints and limitations of function were observed. Sp/Rec and QL values were the lowest, with medians of 25 and 32 points, respectively (healthy $>$ 85 and $>$87). No gender differences were observed, except for pains which were more expressed in women (p=0.013). *In average*, improvement in the KOOS results appeared already 4 weeks after surgery. After 3 months the values of the Sp/Rec subscale had increased about 30 points (40$>$70) in men and about 20 points (20 $>$ 40) in women. At the same time, on the *individual level* the variability of the results was high. After 1 month QL had improved in 17 out of 47, deteriorated in 10 and no change was noted in 20 patients. After 3 months the QL was improved in half the cases. After 12 months still 14 out of 30 patients claimed poor outcome which was more related to women and femoral cartilage damage. The results did not differ in patients with or without synovitis
Conclusions:
KOOS index is useful and flexible tool in conditions when long-term monitoring of the patients is needed.
It seems that severe knee complaints and limitations of SP/Rec (below 40 points) might be the indications for referring the patient to orthopaedic surgeon.
Twelve months after arthroscopic surgery the KOOS results still revealed significant individual differences.
Most cases with unsatisfactory outcome were related to female gender and to grade of the lesion of the femoral cartilage.

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CARTILAGE DAMAGE SEVERITY PREDICTS CLINICAL RESULTS AFTER PARTIAL MENISCECTOMY FOR HORIZONTAL DEGENERATIVE TEAR OF MEDIAL MENISCUS

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Purpose: Early osteoarthritis (OA) of the knee joint often coincides horizontal degenerative tear of the medial meniscus (MM). It is sometimes hard to differentiate symptoms and objective signs due to MM tear from those due to early OA. The aim of this study is to investigate the effect of severity of cartilage damage, which is found incidentally, on clinical outcome after partial meniscectomy for horizontal MM tear.
Methods: Thirty-two patients (32 knees; 13 males and 19 females, 62.1$\pm$8.9 years old) were retrospectively reviewed, who had medial knee pain without any traumatic events, who was diagnosed as MM horizontal degenerative tear by physical examination and plain MRI, and who underwent arthroscopic partial meniscectomy. The patients were followed up for more than one year.
IKDC objective score, Kellgren/Lawrence (K/L) OA grading, ICRS grading for arthroscopic cartilage degeneration were evaluated in order to assess cartilage damage effect on clinical outcomes at final follow-up (average 15.1 months).
Results: IKDC score with ICRS grade-0, 1, 2 was significantly better than that with ICRS grade-3 and 4 (P=0.0075). ICRS grading at the surgery was negatively correlated to post-operative IKDC score (R^2=0.327).K/L grading at the surgery was not significantly correlated to post-operative scores. Osteochondral autogenous transfer was performed in 5 cases (5 knees) and total knee arthroplasty was done in 2 cases (2 knees) as a second surgery. Cartilage damage severity at partial meniscectomy for MM horizontal degenerative tear possibly predicts short-term clinical results. Further study is essential to develop and use non-invasive methods such as Lyon schuss view for better understanding cartilage damage severity.
Conclusions: Cartilage damage predicts clinical results after partial meniscectomy for horizontal degenerative tear of medial meniscus.

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USE OF AN UNLOADER BRACE FOR MEDIAL OR LATERAL COMPARTMENT OSTEOARTHRITIS OF THE KNEE

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Purpose: The purpose of this study was to determine if there was a difference in factors affecting outcomes when comparing a medial unloader to a lateral unloader brace. Our hypothesis was that patients with unloader braces will have improved disability (WOMAC score) over a 6 month period.
Methods: Forty-six patients were enrolled in an IRB approved prospective cohort study. All patients had standard AP and long-standing radiographs taken prior to brace fitting. Patients also completed the WOMAC score prior to brace use, at 6 weeks, and at 6 months. All patients were fitted with an off-the-shelf unloader brace. There were 17 females and 29 males. The average age was 61 years (range 48 to 87). Fourteen patients were fitted with a lateral unloader and 32 with a medial unloader. There was no difference in gender distribution between brace groups.
Results: There was no difference in average age between medial and lateral braced patients (both groups average =61;p=0.9). The